

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/712,117	11/12/2003	Malgorzata Bugajski	BECKER-1005	7669	
7733	7590 01/06/2006		EXAMINER		
	JOCKE, L.P.A. ROADWAY STREET		SAMPLE, DAVID R		
MEDINA, OH 44256			ART UNIT	PAPER NUMBER	
·			1755		

DATE MAILED: 01/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		/\(\bullet \)	<u> </u>				
	Application No.	Applicant(s)					
Office Astion Comments	10/712,117	BUGAJSKI ET AL.					
Office Action Summary	Examiner	Art Unit	_				
	David Sample	1755					
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with t	he correspondence address					
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING ID.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period.  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICAT 136(a). In no event, however, may a reply I will apply and will expire SIX (6) MONTHS te, cause the application to become ABAND	FION.  be timely filed  from the mailing date of this communication.  DONED (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 18 (	October 2005.						
2a)⊠ This action is <b>FINAL</b> . 2b)☐ Thi							
3) Since this application is in condition for allowa	ance except for formal matters,	, prosecution as to the merits is					
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 1	1, 453 O.G. 213.					
Disposition of Claims							
4)⊠ Claim(s) <u>1-3 and 5-19</u> is/are pending in the ap	oplication.						
4a) Of the above claim(s) is/are withdra	awn from consideration.						
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-3 and 5-19</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/	or election requirement.						
Application Papers							
9) The specification is objected to by the Examina	er.						
10) The drawing(s) filed on is/are: a) acc	cepted or b) objected to by t	he Examiner.					
Applicant may not request that any objection to the	e drawing(s) be held in abeyance.	See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correct	ction is required if the drawing(s) is	s objected to. See 37 CFR 1.121(d).					
11)☐ The oath or declaration is objected to by the E	xaminer. Note the attached Of	ffice Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
12)⊠ Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C. § 11	9(a)-(d) or (f).					
a)⊠ All b)□ Some * c)□ None of:							
<ol> <li>Certified copies of the priority documen</li> </ol>	ts have been received.						
2. Certified copies of the priority documen							
3. Copies of the certified copies of the price	•	eived in this National Stage					
application from the International Burea	, ,,						
* See the attached detailed Office action for a list	t of the certified copies not rec	eivea.					
Attachment(s)							
1) Notice of References Cited (PTO-892)	4) Interview Sum						
<ul> <li>2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08</li> </ul>	5) Notice of Inform	ail Date nal Patent Application (PTO-152)					
Paper No(s)/Mail Date <u>20031112</u> .	6)  Other:						

#### **DETAILED ACTION**

Any rejections and/or objections, made in the previous Office Action, and not repeated below, are hereby withdrawn.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### Claim Rejections - 35 USC § 112

Claim 19 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 19 provides for the use of the batch of claims 1 to 18, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

## Claim Rejections - 35 USC § 101

Claim 19 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

## Claim Rejections - 35 USC § 102

Claims 1-3, and 5-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Naito et al. (US Patent No. 4,334,029).

Examples C-32, and 3-2 to 3-6 of Naito et al. anticipate one or more claims 1, 2, 5-8, 11-16, and 18. See col. 9, lines 26-67, col. 10, lines 26-38, col. 13, lines 31-32, col. 19, lines 64-66, and Table 12, col's 35-38.

Instant claim 1 states that the batch is "for making repairs on hot refractory surfaces." MPEP 2111.02 states:

During examination, statements in the preamble reciting the purpose or intended use of the claimed invention must be evaluated to determine whether the recited purpose or intended use results in a structural difference (or, in the case of process claims, manipulative difference) between the claimed invention and the prior art. If so, the recitation serves to limit the claim. [MPEP 2111.02 (Citing *In re Otto*, 312 F.2d 937, 938, 136 USPQ 458, 459 (CCPA 1963)]

No structural difference can be discerned between the prior art and the instant invention as the composition of the reference is identical to the instantly claimed composition.

The examiner notes that the present claims refer to mass percent whereas the reference refers to parts by weight. The following is a table showing the compositions of the reference in mass percent:

Application/Control Number: 10/712,117 Page 4

Art Unit: 1755

Example:	C-32	3-2	3-3	3-4	3-5	3-6
Siliceous binder	SSB-4 (sodium boron silicate)	SSB-4	SSB-4	SSB-4	SSB-4	SSB-4
Siliceous binder in M%	5	5	7	8	5	5
C-forming component	Tar and pitch	PRP (Phenolic resin)	PRPR	PRP	PRP	PRP
C-forming component in M%	5	5	5	5	5	8
Phosphate containing component	H-3 (Silicon polyphosphate)	Н-3	H-3	H-3	H-3	H-3
Phosphate containing component in M%	. 3	3	3	3	5	4
Refractory Mat'l M%	87	87	85	84	87	83

The refractory material in the above examples was sintered coarse alumina, sintered fine powder alumina and scaly graphite having a particle size of 1-3 mm, less than 0.074 mm, and less than 0.074 mm, respectively. See the table bridging col's 34 and 35.

The reference fails to disclose an example which anticipates claims 3 and 17, however, the reference discloses closely overlapping ranges with the ranges recited in claims 3 and 17 and are deemed to be sufficiently specific to anticipate the ranges of claims 3 and 17. See the abstract of the reference and MPEP 2131.03.

The reference fails to disclose the properties of claims 1, 9 and 10, however, the properties of a refractory are determined by its composition, and the composition of the reference is identical to the composition of the reference. Therefore, the claimed properties are assumed to be inherent to the composition of the reference. See MPEP 2112.

Art Unit: 1755

The recitations of claim 19 can be found in the reference at col. 8, lines 32-48.

#### Claim Rejections - 35 USC § 103

Claims 3 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naito et al. (US 4,334,029).

As noted above, Naito et al. fails to disclose an anticipatory example, and for purposes of this rejection, it is assumed that the ranges are not sufficiently specific to anticipate claims 3 and 17.

However, the reference describes a composition with overlapping ranges of components with the composition of the instant claims. See the abstract. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

#### Response to Arguments

Applicant's arguments filed October 18, 2005 have been fully considered but they are not persuasive.

Applicants assert that the amendment has overcome the rejection of claim 19 as an improper 'use' claim. This argument is not deemed persuasive. A proper 'process' claim recites a "process for repairing a refractory lining comprising...."

Applicants note that the present invention uses a combination of a phosphatic component or c-containing component with a silicatic component whereas the reference requires all three components. This argument is not deemed persuasive because the claims employ "contains" language which allows for the addition of other components even in major amounts. See MPEP

Application/Control Number: 10/712,117 Page 6

Art Unit: 1755

2111.03. In the present case, the "extra" ingredient may be either the phosphatic binder or the containing component depending upon whether 1.2.1 or 1.2.2 is being examined. In other words, there is nothing in the claims that precludes the use of all three components because of the "contains" language.

Applicants note that the purpose of the reference batch is different than the present purpose. This argument is not deemed persuasive. First, the composition is used in a manner that is almost identical to the present invention. The reference discloses that the material may be molded or applied directly to the inner surface of a furnace. See col. 8, lines 38-41. Second, this distinction does not relate to any claimed <u>feature</u> of the present invention.

Applicants argue that the reference does not disclose forming a molten phase at a temperature of greater than 500°C. This argument is not deemed persuasive because the reference employs components that are identical to the instant claims. In particular, the reference discloses employing sodium boron silicate, which must necessarily form a molten phase.

Applicants argue that the reference does not disclose the formation of a molten phase as recited in claims 9 and 10. As noted above, the composition of the reference and the instant invention are identical, therefore the resultant properties must be the same including the amount of molten phase formed.

#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Application/Control Number: 10/712,117 Page 7

Art Unit: 1755

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Sample whose telephone number is (571)272-1376. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (572)272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

> David Sample Primary Examiner

Art Unit 1755